

# Compatible Use Buffers: A New Weapon to Battle Encroachment

*“Providing ranges and training lands that enable the Army to train and develop its full capabilities is crucial to ensure that America’s forces are relevant and ready now.”*

*—Major General Larry J. Lust  
Assistant Chief of Staff for Installation Management*

*By Lieutenant Colonel Joseph L. Knott and Ms. Nancy Natoli*

**T**he foundation of Army operational readiness is highly trained soldiers. To conduct tough, realistic training, commanders require continued access to critical ranges and training lands. Encroachment from population growth, urban development, and environmental requirements limits the Army’s ability to fully utilize our installations for realistic combat training. Congress recently acknowledged the threat of encroachment to military readiness and provided a legislative tool that allows the Army to work with other government or private partners to establish buffer areas around active ranges and training lands.

## Training Realism

**O**ur nation is in the midst of a global war on terrorism. Every soldier and commander knows the importance of training—particularly realistic training—to our ultimate success. In a recent ambush in Iraq, a unit came under attack from grenades, improvised explosive devices (IEDs), mortars, and small arms in downtown Baghdad when crossing under an overpass. “It’s a surreal feeling; everything is [slow-motion]. You really don’t think; you just react like you’ve been trained to during a contact,” a Stryker vehicle gunner said.

As the soldier in Iraq alluded, *we must train as we fight*. The advent of future combat systems with more lethality and increased range will require even larger physical maneuver areas to ensure realism. For example, as shown in the table below, a World War II brigade doctrinal footprint required fewer than 100 square kilometers (sq km). The current Heavy Brigade

Combat Team and Stryker Brigade Combat Team requirements are an order of magnitude larger, while the Future Force requirement will be as much as two orders of magnitude larger—an area greater than the states of Rhode Island and Delaware combined.<sup>1</sup>

Simulations can and do play a key role in training, but when it comes to achieving the level of proficiency that is so critical to ensuring combat readiness, we know there is no substitute for live-fire and maneuver training. As an Army at war, it is more important than ever that we provide tactical commanders unfettered access to ranges and training areas to maintain combat readiness. However, there are several trends that are challenging the Army’s ability to train and maintain weapons proficiency. These trends are collectively termed *encroachment*.

## Encroachment

**G**enerally, encroachment is an infringement on another’s rights or property. For the Department of Defense, encroachment is the cumulative result of any and all outside influences that inhibit normal military training and testing. We see encroachment at military installations in previously isolated and rural areas that are now surrounded by urban development and above-average population growth, such as Fort Bragg, North Carolina (see Figure 1, page 13). These land uses are not compatible with military live-fire training and testing exercises, and they begin to inhibit and intrude on the Army’s ability to train and test our warfighting capabilities.

Brigade Doctrinal Footprint Requirements	
Brigade Type	Doctrinal Battlefield Footprint
World War II Brigade	8 x 12 kilometers (96 sq km)
Heavy Brigade Combat Team	20 x 30 kilometers (600 sq km)
Stryker Brigade Combat Team (2003)	40 x 40 kilometers (1,600 sq km)
Future Force	75-kilometer radius (17,671 sq km)

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Increased environmental regulation also restricts training. Regulations designed to protect air and water quality, manage noise, and protect cultural resources also restrict the timing and frequency of training, reduce the space available for maneuvers and tactical use, and limit the number of live-fire exercises.

Habitat management responsibilities for endangered species represent another component of encroachment that threatens the Army's ability to fully use our land assets. This trend is related to suburban sprawl, which has reduced the size of wildlife habitats on private lands. When Major General R.L. Van Antwerp was Assistant Chief of Staff for Installation Management (ACSIM), he asserted that many of the Army's training ranges are actually "islands of biodiversity," on which wildlife take refuge from the expanding human presence and corresponding habitat destruction. Federal regulations require the Army to protect an increasing list of endangered plants and animals living among those islands, which limits the use of many training and testing ranges. Nearly 100 Army installations are home to more than 150 federally listed and protected species, creating a disproportionate burden for critical habitat management to support species recovery.

While nearly half of Army installations suffer training restrictions because of encroachment, readiness has not suffered, due to the creativity and flexibility of our commanders and noncommissioned officers. When obstacles threaten training, units find a workaround to accomplish the mission. Unfortunately, these workarounds reduce realism, increase costs, and shorten usable equipment life. James Gunlicks, Deputy Director of Training, Deputy Chief of Staff G3, at Headquarters, Department of the Army (HQDA), describes the cumulative effect of workarounds as "death by a thousand paper cuts."

To address these issues, HQDA is pursuing sustainable approaches to buffering ranges and installations from surrounding growth and balancing environmental mandates with readiness imperatives. The Army has established a Sustainable Range Program to maximize the capability, availability, and accessibility of ranges and training land by minimizing restrictions from external factors. An important component of this program is working with local communities and nongovernmental organizations to improve land-use planning. Congress has also supported this effort with recent legislative authority, allowing the Army to formalize this process through establishing compatible use buffers around military installations.

### Army Compatible Use Buffer Program

**T**he compatible use buffer concept began in the 1990s at Fort Bragg, in the Sandhills region of North Carolina. This area is dominated by a pine ecosystem that is home to the red-cockaded woodpecker, an endangered species. After significant training restrictions were imposed in the early 1990s, Fort Bragg, the US Fish and Wildlife Service, the state, and other regional partners began to look for solutions to halt the decline of red-cockaded woodpecker habitat. In 1995, the



Figure 1. Fort Bragg, North Carolina

Army entered into a cooperative agreement with The Nature Conservancy to identify and acquire private land or development rights from willing sellers for the purpose of conservation. In 2003, Congress provided explicit legislative authority to expand the Private Land Initiative to other installations.

### Legal Authority

Title 10, United States Code, Section 2684a, "Agreements to Limit Encroachments and Other Constraints on Military Training, Testing, and Operations," was enacted by Congress as Section 2811 of the National Defense Authorization Act for fiscal year 2003. This authority represents a powerful tool and unique opportunity for the Department of Defense to work in partnership with states, other governments, and public or private environmental and conservation groups to achieve a common goal of sustainability. By addressing incompatible land use and unconstrained development, it contributes to managing suburban sprawl and wise growth management. It also provides authority for the Army Compatible Use Buffer (ACUB) Program.

### Program Description

The ACUB Program, which was implemented by guidance in a 19 May 2003 memorandum from the HQDA Deputy Chief of Staff G3 Director of Training, and ACSIM, entitled "Army Range and Training Land Acquisitions and Army Compatible Use Buffers," represents a new and innovative tool to address encroachment at Army installations. ACUBs allow the Army to work with partners to encumber land to protect habitat and training without using the lengthy and complicated land acquisition process administered under Army Regulation 405-10, *Acquisition of Real Property and Interests Therein*.

### ACUB Process

**A**ll installations can evaluate ACUBs as a possible tool to mitigate encroachment effects on the training mission. ACSIM is the proponent for ACUBs and has final approval authority; however, Active Army installations

*“Encroachment issues can impact the ability to exercise soldiers, leaders, units, and equipment in a real-world environment, prior to deployment to a war zone.”*

*—General John Abrams  
Former Commanding General  
US Army Training and Doctrine Command*

With legal arrangements in place, the cooperating partner works with willing landowners to acquire land and provide a natural buffer between military training lands and residential or commercial activities. The partner—not the Army—receives the deeded interest in the property and provides for long-term habitat management. Pursuant to the terms of the cooperative agreement, the installation may retain access rights to conduct compatible military training.

The Army's Range and Training Land Strategy (RTLS) provides HQDA a prioritized list of installations with critical training land shortfalls and installations with potential for significant expansion and a list of strategic training land reserves. Part of the RTLS includes identifying and quantifying encroachment and its effects. Using this approach, the RTLS identifies 12 ACUB priorities:

- ## ACUB Successes

ACUB partnerships are also underway at major power projection installations such as Fort Carson, Colorado, and



the US Army Garrison, Hawaii. Fort Carson has an approved ACUB proposal to purchase a 14,000-acre parcel to buffer 14 miles of its southern border (see Figure 2). Activities at three Fort Carson firing ranges could be substantially curtailed if this property were developed. The installation and partner have been working with a private owner with large land holdings to prevent further threats to installation activities from encroachment.

The US Army Garrison, Hawaii, is an essential power projection platform with minimal deployment time for the Pacific theater. The Garrison has negotiated a draft agreement to cooperate in purchasing a 1,100-acre parcel that may soon be developed. Purchasing this property, with the Hawaii state parks holding title and land management responsibility, will allow land to be dedicated to increasing the endangered plant population outside the fence and meet the requirements of a US Fish and Wildlife Service “no jeopardy” opinion. The Army’s \$3 million contribution to the total \$12 million purchase will also relieve some residential land development pressure in the area.

### Summary

**A**CUBs represent an innovative and effective tool for mitigating the effects of encroachment on Army training and testing. They provide a mechanism for an installation to share natural resource conservation responsibilities with our neighbors, positively influence land use outside of the installation, and ensure that the installation’s land resources are used most effectively to provide the realistic training and testing that American soldiers require to remain victorious in battle and persuasive in peace.

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### Endnote

<sup>1</sup>As Future Force platforms are developed, fielded, and exercised, the doctrinal footprints will be refined.